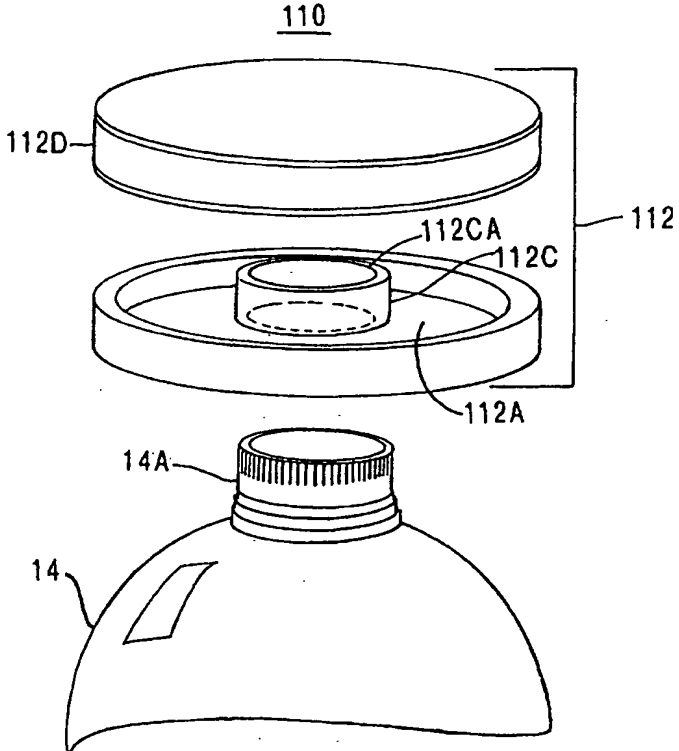


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(21) International Application Number: PCT/US99/10544 (22) International Filing Date: 12 May 1999 (12.05.99) (30) Priority Data: 09/103,774 24 June 1998 (24.06.98) US 09/191,706 13 November 1998 (13.11.98) US (71)(72) Applicant and Inventor: SINGER, Uri [IL/US]; Apartment 14M, 305 East 86th Street, New York, NY 10028 (US). (74) Agent: WEISS, Philip; Graham and James LLP, 885 Third Avenue, New York, NY 10022 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: BOTTLE CAP WITH PRIZE (57) Abstract <p>An attachment (110) for fitting over a bottle cap (14A) of a bottle (14) has a top container (112D) and bottom container (112A) having a central opening for fitting over the bottle cap (14A). The central opening may have teeth to lock onto the bottle cap. The top and bottom containers form a cavity to hold a prize. Alternatively, the top and bottom containers, when removed from the bottle cap, form a yo-yo.</p> 		

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BOTTLE CAP WITH PRIZE**BACKGROUND OF THE INVENTION****Field of the Invention:**

The present invention relates to bottle caps. More particularly, the present
5 invention relates to bottle caps having game paraphernalia incorporated therein.

Description of the Prior Art:

Product marketing often uses enticements to gain a market share. One such
enticement is a prize of chance device which is located on the cap of beverages
such as soda, juices, and other fluid food products. The physical space and volume
10 have heretofore been limited to the space on the underside of the bottle cap or the
outside of the container. While off product devices, such as coupons and toys, are
offered, these add undesirable material handling and coordination tasks all along the
distribution chain. Prior art devices provide tamper indication, and spills but do not
offer improvement over the peel off devices currently in use. What is needed, is a
15 device, which is either a part of a bottle cap or can be attached to a bottle cap late in
the manufacturing process, that has additional volume for containment of objects as
well as printed material.

In Patent Number D365,020, titled Combined Cosmetic Container and Cap,
invented by Pierre Dinand, an ornamental design for a combined cosmetic container
20 and cap, is shown and described.

The patented invention differs from the present invention because the
patented invention is an ornamental design for a combined cosmetic container and
cap. The patented invention lacks features similar to the present invention.

In patent Number 5,361,919, titled Combination Bottle Cap and Construction
25 Toy, invented by Harold L. Hull and Jorge Montalva, a combination bottle cap and

stackable toy is described which allows the bottle caps to be accumulated and then affixed together to form various shapes and configurations, thus providing an incentive for the user to purchase a bottle having the stackable cap.

The patented invention differs from the present invention because the
5 patented invention is a combination bottle cap and a stackable toy which allows the bottle caps to be accumulated and then affixed together. The patented invention lacks features similar to the present invention.

In Patent Number 4,583,651, titled Novelty Bottle Cap-toy Top, invented by Werner Ostberg, a novelty bottle cap-toy top is described which, may be used to seal
10 a bottle and/or a toy top. The bottle cap-toy top comprises a hollow shell of generally semi-spherical configuration and a stem. The hollow shell has a top flat outer surface and opposite thereto a lower opening through which there is an inwardly extending sealing portion adapted to engage and seal the throat of a bottle. The stem, generally perpendicular to both the top flat outer surface and the plane of the
15 lower opening, extends from the interior of the cap, through the opening, and outwardly therefrom. When the cap, top flat portion down, is spun by the stem on a horizontal surface, the cap will rotate out of its central axis through ever larger circles until the end of the stem contacts the horizontal surface causing the cap to jump into an inverted position and spin on the tip of the stem. As the spinning slows, the top
20 falls, rolls on its surface and comes to rest on the top flat face.

The patented invention differs from the present invention because the patented invention is a novelty bottle cap-toy top. When the cap is spun by the stem on a horizontal surface, the cap will rotate out of its central axis through ever larger circles until the end of the stem contacts the horizontal surface causing the cap to
25 jump into an inverted position and spin on the tip of the stem. As the spinning slows,

the top falls, rolls on its surface and comes to rest on the top flat face. The patented invention lacks features similar to the present invention.

In Patent Number 4,050,600, titled Container Spillage Prevention System, invented by Martin C. Jennings, a container spillage prevention system for

5 preventing the leakage or spilling of liquid contained within a bottle through a nipple opening when the bottle is positionally located on a substantially horizontal surface is described. The spillage prevention system may also be used as a toy device which provides for a teething ring for a child. Additionally, the system has a contamination resistant feature such that the nipple of the bottle is positionally displaced from the
10 surface upon which the bottle is resting to negate the possibility of continued contact of the nipple with a contaminated surface. The container spillage prevention system includes a cap member which engages the neck portion of a bottle where the cap has an opening through which the nipple may be mounted. A ring element is secured to a lateral wall of the cap member having dimensions such that an acute
15 angle is formed between a peripheral surface of the bottle and the substantially horizontal surface upon which it is in contact.

The patented invention differs from the present invention because the patented invention is a cap member which surrounds the neck portion of a bottle. The cap has an opening through which the nipple may be mounted. A ring element
20 is secured to a lateral wall of the cap member having dimensions such that an acute angle is formed between a peripheral surface of the bottle and the substantially horizontal surface upon which it is in contact. The diameter of the ring is preselected to prevent the bottle from tipping beyond an angle at which fluids flow out the nipple. The present invention is a container having a cylindrical top and a bottom. The top
25 and bottom are threadably attached at an outer perimeter. The top and bottom form

a cavity which can hold a prize. A central opening formed in the container is adapted to cooperate with an outside diameter of a bottle cap. The central opening has a latching device therein. The bottle cap has a latching device, which engages the latching device in the central opening. The latching devices function to prevent the container from being removed from the bottle cap when the bottle cap is installed on a bottle. The prize can be for example, toys, literature, clues, awards, coupons, rebates, or pieces of puzzles, or any other item which can fit inside the cavity of the container. The prize is placed in the container and the container placed on top of the bottle cap. When the latches engage, the container cannot be removed from the bottle cap, until the bottle cap is removed from the bottle.

Numerous innovations for bottle caps have been provided in the prior art that are adapted to be used. Even though these innovations may be suitable for the specific individual purposes to which they address, they would not be suitable for the purposes of the present invention as heretofore described.

15 SUMMARY OF THE INVENTION

The present invention is a bottle cap having a cylindrical top and a bottom. The top and bottom are threadably attached at an outer perimeter. The top and bottom form a cavity which holds a prize. A central opening formed in the container is adapted to cooperate with an outside diameter of a bottle cap. The central opening has a latching device therein. A bottle cap has a latching device which engages the latching device in the central opening. The latching devices function to prevent the container from being removed from the bottle cap when the bottle cap is installed on a bottle. A prize can be for example, toys, literature, clues, awards, coupons, rebates, or pieces of puzzles or any other item which can fit inside the cavity of the container. The prize is placed in the container and the container placed

on top of the bottle cap. When the latches engage, the container cannot be removed from the bottle cap. The container can have different shapes and sizes. In one embodiment the container can be in the shape of an animal or character. The only element required by the container is that it must be capable of being secured to the
5 bottle cap or bottle. In a further embodiment the container can be compartmentalized, so that separate items can be placed in the container and not mixed together. The container for example, can then be used as a pill or vitamin dispenser or holder.

The types of problems encountered in the prior art are spill prevention and
10 tamper proofing of bottles. In the prior art, unsuccessful attempts to solve this problem were attempted namely: peel of shields and rings preventing a bottle from tipping over. However, the problem is solved by the present invention because a container is provided which attaches to a bottle cap or is a part of a bottle cap. The container has sufficient room to contain a prize or chance device.

15 The present invention solved a long felt need for a device to contain small objects attached to a bottle cap.

Accordingly, it is an object of the present invention to provide a first bottle cap which has a first prize container.

More particularly, it is an object of the present invention to provide a first prize
20 container bottom defined by a first prize container outer skirt with an attachment means at an outer rim functioning to attach to a first container top.

In keeping with these objects, and with others which will become apparent hereinafter, one feature of the present invention resides, briefly stated, in a first prize container bottom which defines a compartment for holding prize devices.

When the bottle cap is designed in accordance with the present invention, a first prize container inner skirt, has a first prize container inner skirt opening that encompasses a bottle cap.

In accordance with another feature of the present invention a first prize
5 container top lip is removably and securely attached to an outer rim functioning.

Another feature of the present invention is that a second bottle cap has a container which projects into a bottle neck opening.

Yet another feature of the present invention is that a second prize container skirt is securely attached to a bottle cap on one end.

10 Still another feature of the present invention is that a second prize container bottom is securely attached to a bottom end of the second prize container skirt.

Yet sill another feature of the present invention is that a third bottle cap is a Yo-Yo.

A further object of the present invention is to provide a fourth bottle cap
15 (attachment). The fourth bottle cap (attachment) has a hollow cavity and a hole in the center to allow placement on the bottle or bottle cap. The hollow cavity can be used to place a prize inside. The fourth bottle cap (attachment) can allow the bottle cap of the bottle to protrude through the center of the hollow container.

The novel features which are considered characteristic for the invention are
20 set forth in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of the specific embodiments when read and understood in connection with the accompanying drawings.

**LIST OF REFERENCE NUMERALS
UTILIZED IN THE DRAWINGS**

COMMON COMPONENTS

- 14 – bottle (14)
- 5 14A – bottle cap (14A)
- 14B – bottle neck (14B)

FIRST EMBODIMENT

- 110 – first bottle cap (110)
- 10 112 – first prize container (112)
- 112A – first prize container bottom (112A)
- 112B – first prize container outer skirt (112B)
- 112C – first prize container inner skirt (112C)
- 112CA – first prize container inner skirt opening (112CA)
- 15 112D – first prize container top (112D)
- 112DA – first prize container top lip (112DA)

SECOND EMBODIMENT

- 210 – second bottle cap (210)
- 20 212 – second prize container (212)
- 212A – second prize container bottom (212A)
- 212B – second prize container skirt (212B)
- 212BA – second prize container skirt top (212BA)
- 212C – second prize container cap (212C)
- 25 212CA – second prize container cap top (212CA)

212CB – second prize container cap threaded skirt (212CB)

THIRD EMBODIMENT

310 – third bottle cap (310)

5 312 – Yo-Yo (312)

314T – Yo-Yo top (314T)

314B – Yo-Yo bottom (314B)

314BA – Yo-Yo bottom threaded skirt (314BA)

314C – Yo-Yo string (314C)

10

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is an exploded perspective view of a first bottle cap.

FIGURE 2 is an exploded cross sectional side view of a first bottle cap.

FIGURE 3 is a side view of a second bottle cap.

15 **FIGURE 4** is a side view of a third bottle cap.

FIGURE 5 is a top view of a fourth bottle cap (attachment).

FIGURE 6 is a side view of a fourth bottle cap (attachment).

FIGURE 7 is a side view of a fourth bottle cap (attachment).

FIGURE 8 is an exploded view of a fourth bottle cap (attachment).

20 **FIGURE 9** is an illustration of the fourth bottle cap (attachment) used as a yo-yo.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Firstly, referring to **FIGURE 1** which is an exploded perspective view of a first bottle cap (110) and to **FIGURE 2** which is an exploded cross sectional side view of
25 a first bottle cap (110).

A first bottle cap (110) contains a prize therein. The first bottle cap (110) is insertable over a bottle cap (14A) of a bottle (14). The first bottle cap (110) comprises a first prize container (112) which comprises a first prize container bottom (112A) having a central opening therein. The first prize container bottom (112A) comprises a first prize container outer skirt (112B) which is positioned around a periphery extending upwardly therefrom and a first prize container inner skirt (112C) positioned around the central opening extending upwardly therefrom. The first prize container (112) comprises a hollow first prize container top (112D) removably positionable on the first prize container outer skirt (112B) forming a cavity therebetween containing a prize therein. The first prize container inner skirt (112C) comprises a first prize container inner skirt opening (112CA) having sufficient size to accept the bottle cap (14A) therein.

The first prize container top (112D) further comprises a first prize container top lip (112DA) positioned around a periphery functioning to form a tight seamless engagement with the first prize container outer skirt (112B).

The first bottle cap (110) can be manufactured from plastic, plastic composite, metal and metal alloy or any material used to make bottle caps.

The first prize container inner skirt (112C) comprises a height in a range from about 1/8 to about 3 inches, but can vary based on the size of the bottle cap 14A.

The first prize container outer skirt (112B) height will vary depending on the size of the prize that will be placed in the container (112).

The first prize container top (112D) height will vary depending on the size of the bottle cap 14A and the size of the prize.

Next, referring to **FIGURE 3** which is a side view of a second bottle cap (210) container having a prize therein. The second bottle cap (210) is insertable over and

within a bottle (14). The second bottle cap (210) comprises a second prize container (212) which comprises a second prize container bottom (212A) having a second prize container skirt (212B) positioned around a periphery extending upwardly therefrom. The second prize container skirt (212B) comprises a smaller diameter than a bottle neck (14B). Further, a second prize container skirt top (212BA) is removably attachable to a second prize container cap top (212CA) of a second prize container cap (212C) forming a prize container therebetween. The second prize container cap (212C) comprises a second prize container cap threaded skirt (212CB) which is engagable to an outer threaded surface of the bottle neck (14B).

10 The second bottle cap (210) can be manufactured from plastic, plastic composite, metal and metal alloy, or any material used to make bottle caps.

 The second prize container skirt (212B) and the second prize container bottom (212A) can be made transparent or translucent.

 Referring to **FIGURE 4** which is a side view of a third bottle cap (310), the third bottle cap (310) comprises a Yo-Yo (312). The Yo-Yo (312) comprises a round Yo-Yo top (314T) connected to a round Yo-Yo bottom (314B) having a Yo-Yo sting (314C) therebetween. The Yo-Yo bottom (314B) comprises a Yo-Yo bottom threaded skirt (314BA) engagable with a threaded bottle neck (14B). The third bottle cap (310) can be manufactured from plastic, plastic composite, metal, metal alloy, wood, wood composite, or any material used to make used to make bottle caps.

20 **FIGURES 5-8** illustrate a fourth bottle cap (attachment) (410). Fourth bottle cap (attachment) (410) is made of a top container (411) and a bottom container (412). Although the figures illustrate two pieces (411) and (412) which make up the container (414), any of a number of pieces can be used to make up a container (414). Together top container (411) and bottom container(412) make up a hollow

container (414). Within hollow container (414) can be placed any of a number of items, such as toys, literature, clues, awards, coupons, rebates, pieces of puzzles, or any other item which can fit inside the cavity of the container (414). The shape of container (414) can vary. In one embodiment, as illustrated by Figure 5, the container (414) is in the shape of a circle. However, other shapes can be used, such as the shape of animals, characters, or practically any other shape. The only requirement, is that the container (414) have a means for attaching securely to the bottle (14) or bottle cap (14A). Figure 5 illustrates the use of teeth (416) to securely attach to a bottle cap (14A). Figure 6 illustrates the container (414) being securely attached to bottle cap (14A). Other means known in the art can be used to attach the container (414) to the bottle cap (14A), such as an adhesive, the container (414) can be friction fit onto the bottle cap (14A), or the container (414) can be snapped or locked onto the bottle cap (14A). In a preferred embodiment, when attaching the container (414) to bottle cap (14A) such means must be able to secure the container (414) to the bottle cap (14A) so that the container (414) can not be removed from the bottle cap (14A) while the bottle cap (14A) is secured on the bottle (14). In a further embodiment, the means for attachment of the container (414) to the bottle (14) or bottle cap (14A) do not require the bottle cap (14A) to be removed from bottle 14 before the container (414) can be removed. However, in this embodiment the container (414) must still be capable of being securely attached to the bottle (14) or bottle cap (14A).

Figures 7 and 8 illustrate a preferred embodiment of the present invention.

Figures 7 and 8 show the container (414) securely attached to bottle cap (14A) by teeth (416). The height of container (414) should allow bottle cap (14A) to either be even with the top of the container (414) or to protrude through container (414). This

allows for the bottles to be stacked more easily. Figures 7 and 8 further show an additional way of securing the container (414) to the bottle (14). A locking mechanism (415) is placed under the lip (14D) of the bottle (14).

FIGURE 9 illustrates the use fourth bottle cap (attachment) (410) as a yo-yo.

- 5 Top container (411) and bottom container (412) make up the two halves of the yo-yo. An axis fixer (420) is placed through the center of bottom container (412) while a second axis fixer (428) is placed through the center of top container (411). A string holder (424) having string (422) is placed between top container (411) and bottom container (412). An axis (424) is placed through the center of string holder (424),
10 and axis fixers (420) and (428). The axis (424) is preferably made of steel or another type of metal. In a preferred embodiment, all of the pieces, (420), (422), (424), (426) and (428) fit inside container (414).

- The first bottle cap (110), and fourth bottle cap (attachment) (410) can have the prize unit heat sealed within the container and then the container may be press
15 fit on to bottle cap (14A).

Although each of the embodiments illustrated above show the bottle caps being attached to the top of the bottle, using the securing means described above, the bottle cap can be attached to other parts of the bottle.

- It will be understood that each of the elements described above, or two or
20 more together, may also find a useful application in other types of constructions differing from the type described above.

While the invention has been illustrated and described as embodied in a bottle cap, it is not intended to be limited to the details shown, since it will be understood that various omissions, modifications, substitutions and changes in the forms and

details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for
5 various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.

What is Claimed Is:

1. An attachment, being capable of insertion over a bottle cap of a bottle, the attachment comprising:

a top container having a central opening therein, a bottom container having a central opening therein, said top and bottom containers when placed together forming a hollow container, said hollow container being capable of being securely attached to a bottle cap.

2. The attachment described in claim 1 wherein said attachment is manufactured from a material comprising plastic, plastic composite, metal and metal alloy.

3. The attachment described in claim 1 wherein said hollow container contains a prize.

4. The attachment described in claim 1 wherein said attachment has a shape of an animal.

5. The attachment described in claim 1 wherein said attachment is attached to said bottle cap via teeth formed in said central opening of said hollow container.

6. The attachment described in claim 1 wherein said attachment is attached to said bottle cap via a locking mechanism.

7. The attachment described in claim 1 wherein height of said attachment is less than or equal to height of said bottle cap.

8. The attachment described in claim 1 wherein said attachment can not be removed from said bottle until said bottle cap is removed.

9. The attachment described in claim 1 wherein said attachment can be used as a Yo-Yo.

10. The attachment described in claim 7 wherein parts for said yo-yo are stored with said hollow container.

11. An attachment for a bottle or bottle cap comprising a container having a central opening therein;

5 said container being hollow;

 said container being capable of being securely attached to said bottle or said bottle cap.

12. The attachment of claim 11 wherein said bottle cap must be removed before said container can be removed from said bottle or said bottle cap.

10 13. The attachment of claim 11 wherein said container is made up of at least two pieces.

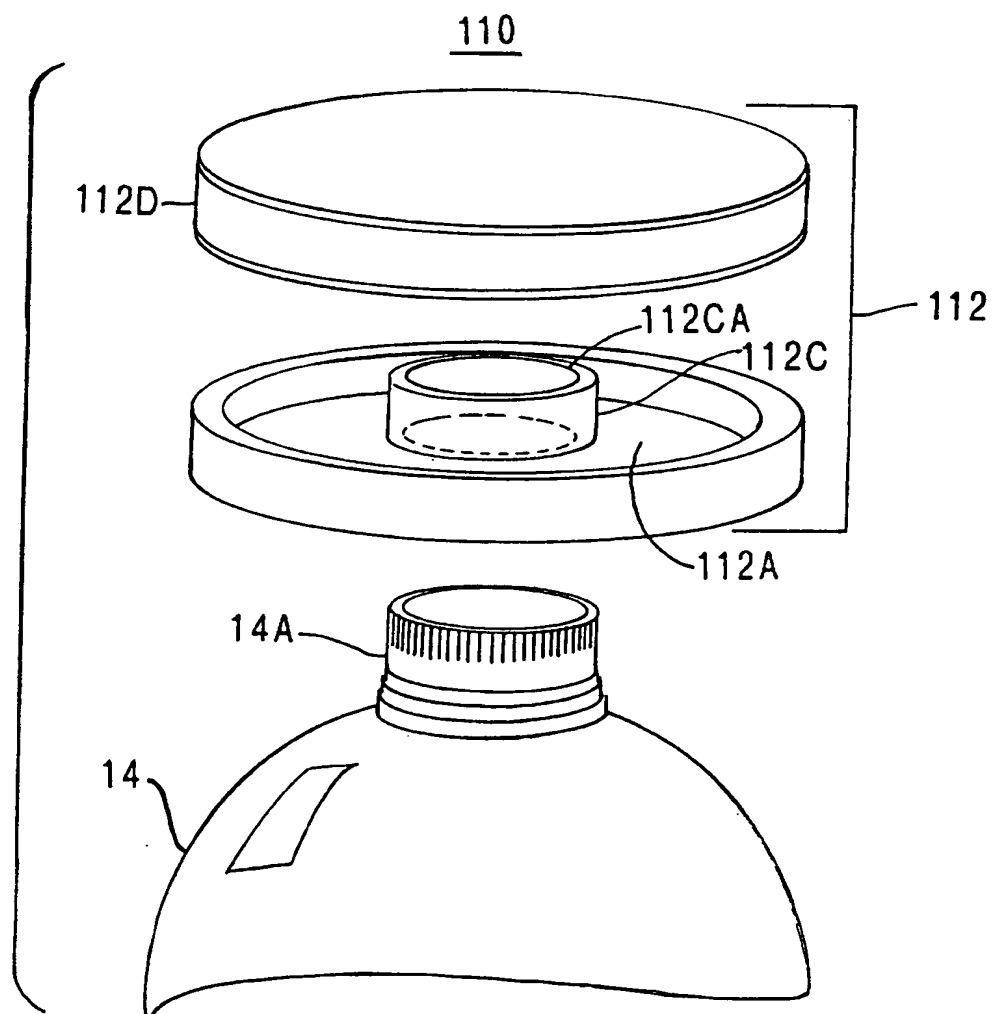


FIG.1

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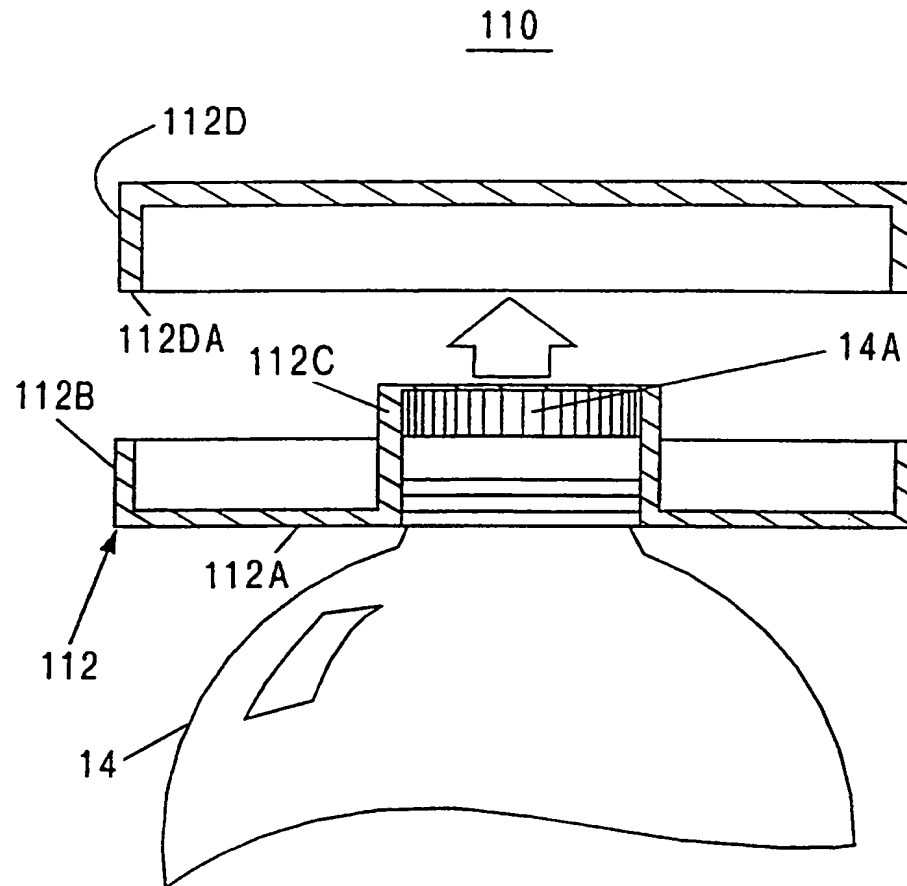


FIG.2

3/8

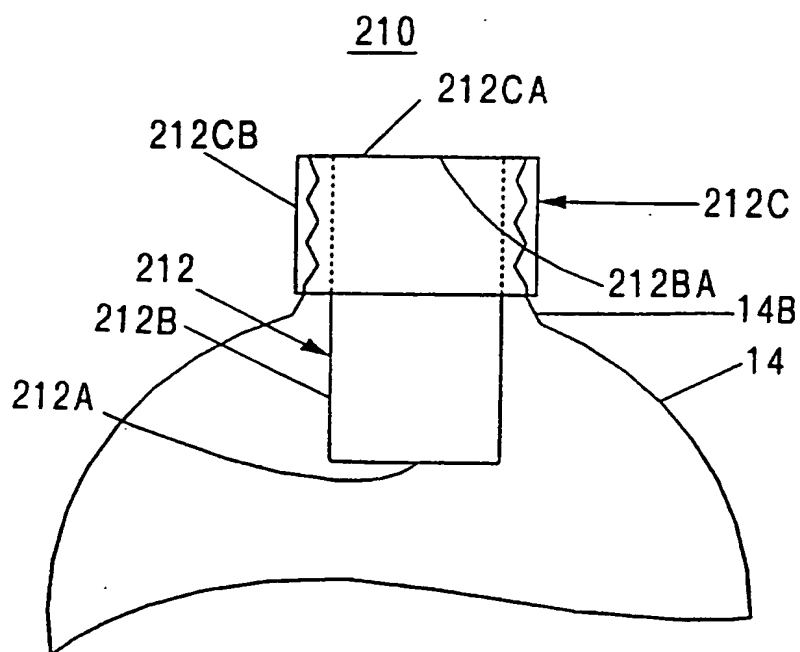


FIG.3

4/8

310

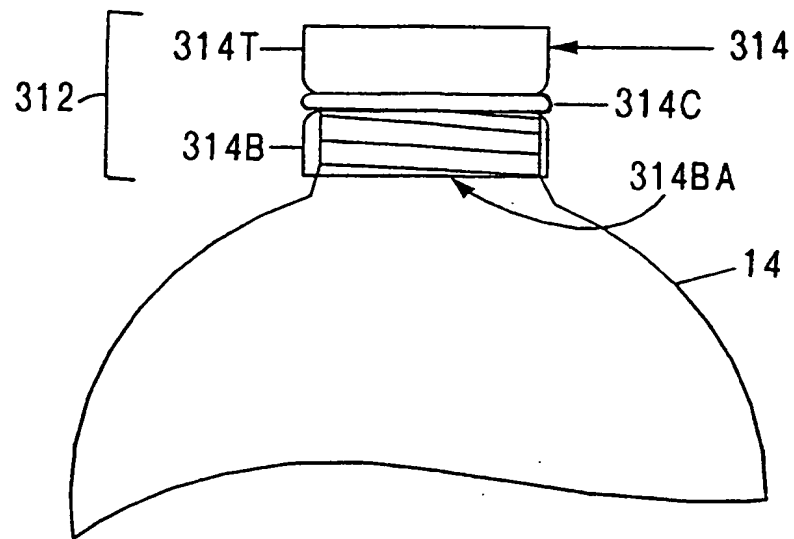


FIG. 4

5/8

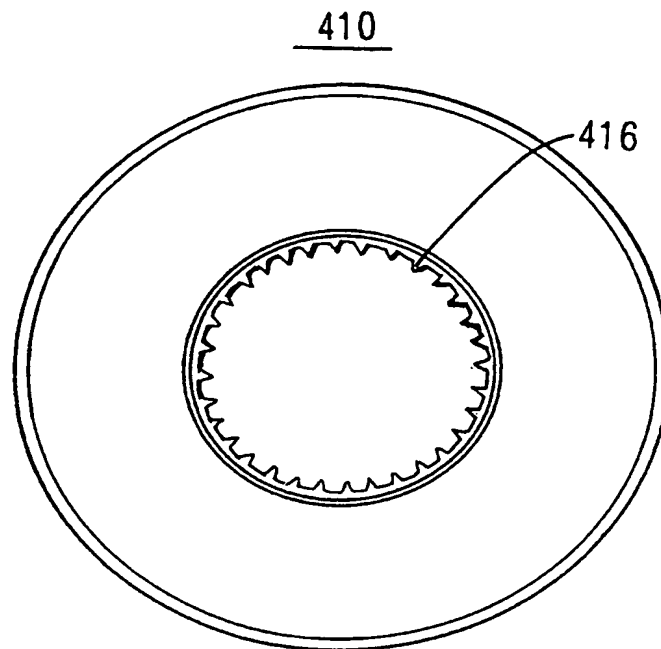


FIG. 5

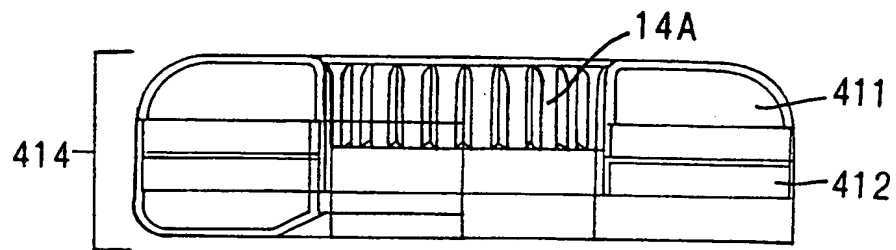
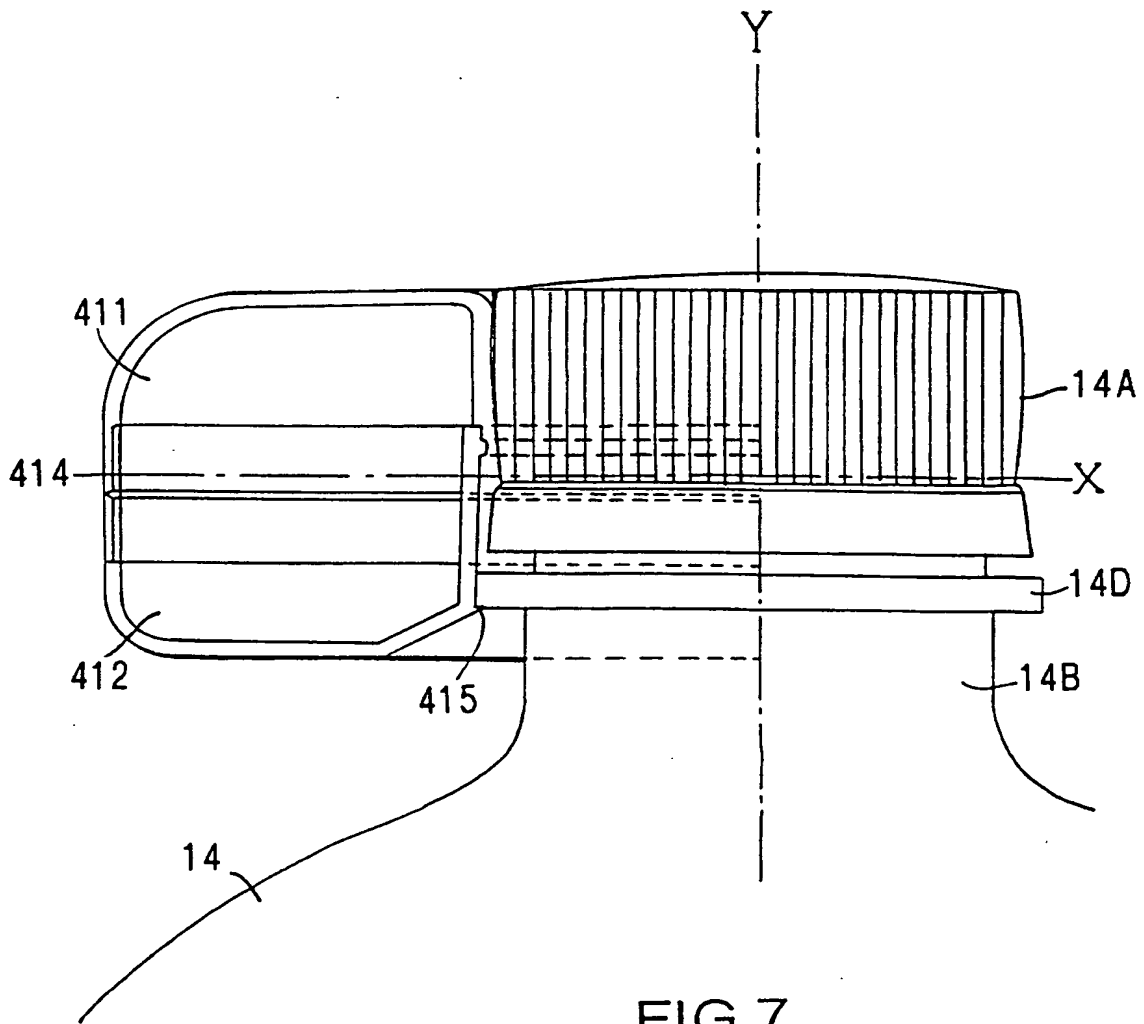


FIG. 6

6/8



7/8

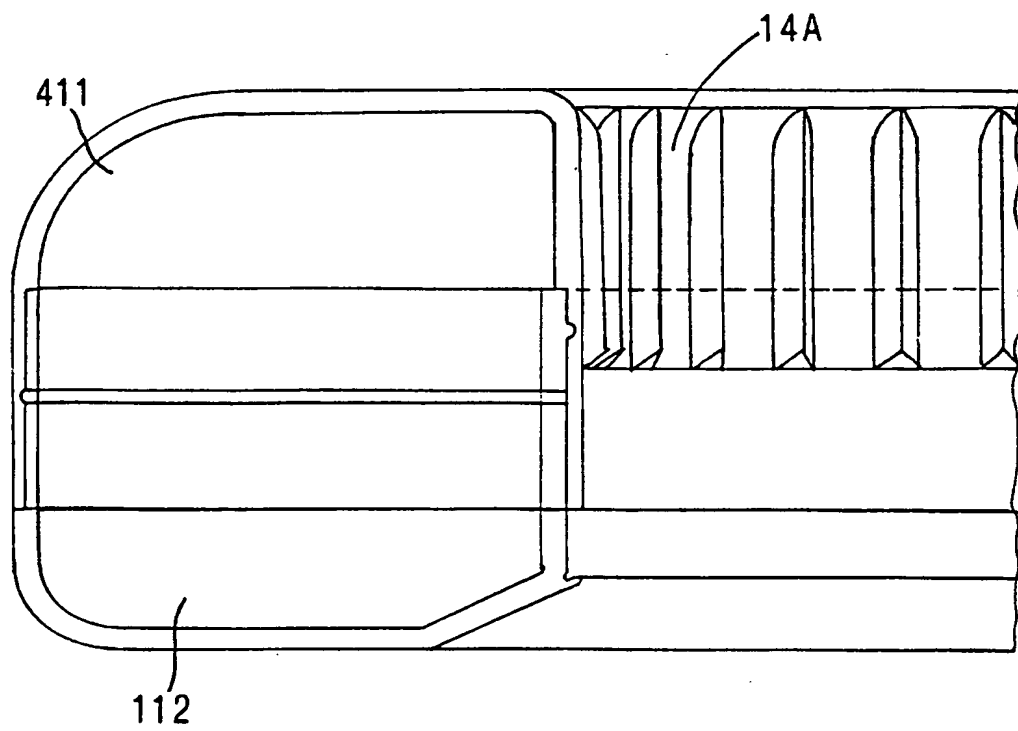


FIG. 8

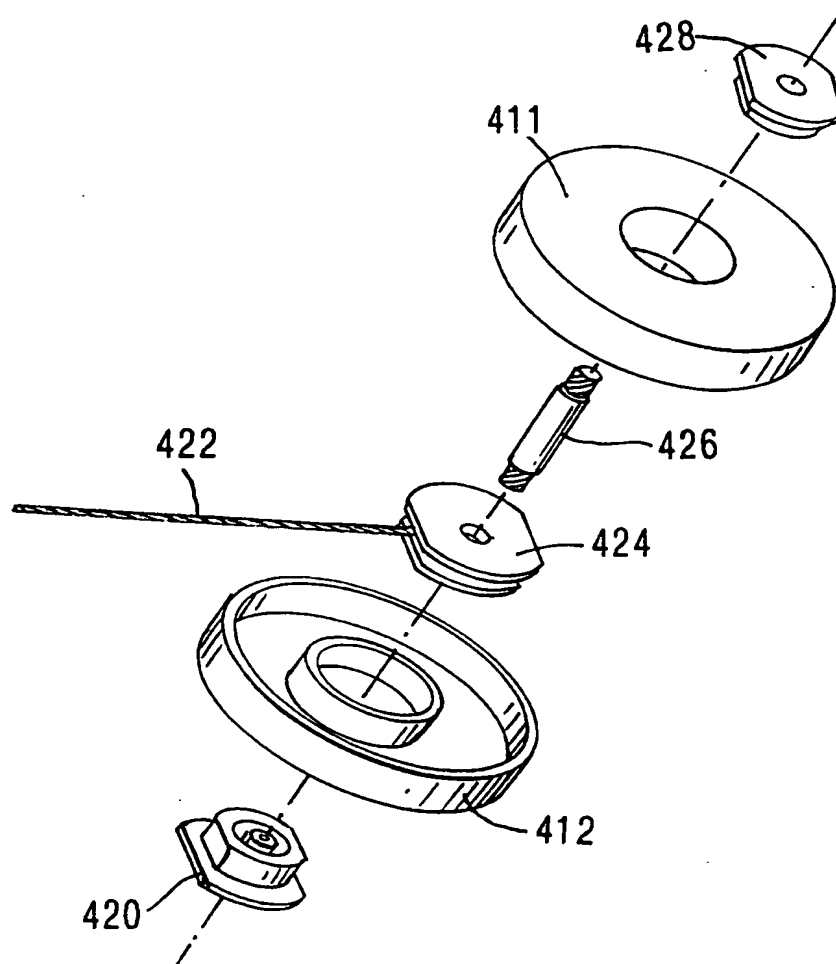


FIG.9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/10544**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :B65D 21/02, 51/28; A63H 1/30

US CL :Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 220/23.83, 23.86, 212, 503, 505, 521, 522; 215/6, 10, 227, 228, 386; 206/216, 217; 446/71, 77, 250, 251; D21/463, 464

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 2,975,547 A (GREVE) 21 March 1961, see entire document.	1-3,7,9-10 — 4
X — Y	US 5,743,423 A (FRANCO) 28 April 1998, see entire document.	1-3,6,8,11-13 — 7
X	US 2,318,434 A (STRAUCH) 04 May 1943, see entire document.	1,3,5-6,11
Y	US 1,784,684 A (BELL) 09 December 1930, see entire document.	4

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.


* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Authorized officer

NATHAN J. NEWHOUSE

Telephone No. (703) 308-4158


 Sheila Vanev
 Paralegal Specialist
 Technology Center 3700

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER:
US CL :

220/23.86, 212, 503, 505; 215/6, 227, 228, 386; 206/217; 446/71